

Appl. No. 09/414,762
Ampl. Dated 08/13/2004
Reply to Office Action of May 17, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-20. (Cancelled.)

21. (Currently Amended) A communications method for an endpoint being one of (i) an Internet Protocol (IP) telephone and (ii) a telephone coupled to a terminal gateway, the communications method comprising:

registering a first line of the endpoint with a first communicationstelephony server, and registering a second line of the endpoint with a second communicationstelephony server differing from the first telephony server, each of the first and second communicationstelephony servers registers the endpoint by storing a list identifying endpoints, including the endpoint, in communication with the first telephony server and the second telephony server storing a list identifying endpoints, including the endpoint, in communication with the second telephony server, and at least one of the first and second telephony servers includes information accessible by both the first and second telephony servers and associated with the endpoint, the information including a telephone number, a local line number, an Internet Protocol (IP) address and a Media Access Control (MAC) address of the endpoint;

establishing a first telephone call on the first line of the endpoint to a second endpoint via the first communicationstelephony server; and

establishing a second telephone call on the second line of the endpoint to a third endpoint via the second communicationstelephony server.

22. (Currently Amended) The communications method of claim 21 wherein establishing the second telephone call comprises establishing the second telephone call on the second line of the endpoint to a third endpoint via the second communicationstelephony server, without disconnecting the first telephone call on the first line of the endpoint to the second endpoint via the first communicationstelephony server.

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23. (Currently Amended) The communications method of claim 21 further comprising receiving a third telephone call on the first line of the endpoint from a fourth endpoint via a third ~~communication~~telephony server.

24. (Currently Amended) The communications method of claim 21 wherein establishing the first telephone call comprises:

- sending an off-hook message to the first ~~communication~~telephony server in response to detecting the first line going off hook;

- receiving a dialtone message from the first ~~communication~~telephony server in response to sending the off-hook message;

- sending the telephone number of the second endpoint to the first ~~communication~~telephony server;

- receiving a ring message from the first ~~communication~~telephony server to the second endpoint;

- receiving a connect message from the first ~~communication~~telephony server; and communicating with the second endpoint in response to receiving the connect message.

25. (Currently Amended) A terminal gateway adapted to convert Internet Protocol (IP) media packets from a network into analog signals and to forward the analog signals to at least one endpoint via a dedicated communication link between the terminal gateway and the at least one endpoint, said terminal gateway comprising:

- a memory including one or more instructions; and

- a processor coupled to the memory, said processor, in response to the one or more instructions, to,

- establish a first communication path between a first logical line of a first endpoint and a second endpoint via a first ~~communication~~telephony server coupled to the network, in response to a first input, by the first telephony server accessing an Internet Protocol (IP) address and a Media Access Control (MAC) address for the second endpoint from a first registration table stored within the first telephony server, and if not contained in the first registration table, from a table stored within the first telephony server, the table comprises (i) a telephone number of the

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first endpoint, the second endpoint and a third endpoint, (ii) a number associated with the first logical line and a second logical line, (iii) an Internet Protocol (IP) address and Media Access Control (MAC) address of each terminal gateway coupled to the first, second and third endpoints, and (iv) an IP address and a MAC address of the first telephony server, and a second telephony server; and

establish a second communication path between ~~the~~ second logical line of the first endpoint and ~~the~~ third endpoint via a second ~~communication~~ telephony server coupled to the network, in response to a second input, by the second telephony server accessing an Internet Protocol (IP) address and a Media Access Control (MAC) address for the third endpoint from a second registration table stored within the second telephony server, and if not contained in the second registration table, from the table stored within the first telephony server, said second communication path being established via the second telephony ~~communication~~ server independently of the first communication path.

26. (Original) The terminal gateway of claim 25 wherein the terminal gateway comprises at least part of the first endpoint.

27. (Original) The terminal gateway of claim 25 wherein the second and third endpoints are the same endpoint.

28-32. (Cancelled.)

33. (Currently Amended) An endpoint, being one of (i) an Internet Protocol (IP) telephone and (ii) a telephone coupled to a terminal gateway, for coupling to one or more ~~communication~~telephony servers, the endpoint comprising:

a first logical line for registering with a first ~~communication~~telephony server through storage of information within the first telephony server, the information includes (1) a first registration table including a list of endpoints including the endpoint registered with the first telephony server and (2) a table accessible by each of the telephony servers, the table includes information, associated with a plurality of endpoints including the endpoint, that comprises (i) a telephone number of the endpoint, (ii) a number associated with the first logical line, (iii) an

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Internet Protocol (IP) address and Media Access Control (MAC) address of the terminal gateway coupled to the endpoint, and (iv) an IP address and a MAC address of the first telephony server, said first logical line capable of receiving communications services from the first ~~communications~~telephony server; and

a second logical line for registering with a second ~~communications~~telephony server through storage of a second registration table within the second telephony server including a list of endpoints including the endpoint registered with the second telephony server, said second logical line capable of receiving communications services from the second ~~communications~~telephony server.

34. (Currently Amended) The endpoint of claim 33 wherein the first and second logical lines are mapped to first and second keys on the endpoint.

35. (Currently Amended) The endpoint of claim 33, wherein further comprising a terminal gateway for coupling to the first and second communications servers via a network, said terminal gateway converting signals representing communications calls on the first and second logical lines to packets on the network, and vice versa.

36-38. (Cancelled.)

39. (Currently Amended) An endpoint being one of (i) an Internet Protocol (IP) telephone and (ii) a telephone coupled to a terminal gateway, the endpoint comprising:

means for registering a first line with a first telephony server by storage of information within the first telephony server, the information comprises a first registration table including a list of endpoints including the endpoint registered with the first telephony server and a table including information associated with the endpoint including (i) a telephone number of the endpoint, (ii) a number associated with the first line, and (iii) an Internet Protocol (IP) address and Media Access Control (MAC) address of the terminal gateway;

means for registering a second line with a second telephony server differing from the first telephony server by storage of information within the second telephony server, the information

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including a second registration table including a list of endpoints including the endpoint registered with the second telephony server; and

means for establishing a first communications call on the first line via the first telephony server, the first telephony server collaborates with the second telephony server if the first telephony server does not support a requested feature.

40. (Currently Amended) The endpoint of claim 39 further comprising means for establishing the second communications call on the second line via the second telephony, without disconnecting the first communications call on the first line via the first telephony server.

41. (Currently Amended) The endpoint of claim 40 wherein said means for establishing the first communications call comprises:

means for sending an off-hook message to the first ~~communications~~telephony server in response to detecting the first line going off hook;

means for receiving a dialtone message from the first ~~communications~~telephony server in response to means for sending the off-hook message;

means for sending a telephone number of a remote endpoint to the first ~~communications~~telephony server;

means for receiving a connect message from the first ~~communications~~telephony server;
and

means for communicating with the remote endpoint in response to said means for receiving said connect message.

42-52. (Cancelled.)

53. (New) The communications method of claim 21, wherein the IP address and the MAC address of the endpoint include an IP address and a MAC address of the terminal gateway.

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54. (New) The communications method of claim 53, wherein the information accessible to both the first and second telephony servers includes an electronic mail address of the endpoint.

55. (New) The communications method of claim 53, wherein the information accessible to both the first and second telephony servers includes a field identifying features available to the endpoint including calling waiting and call forwarding.

56. (New) The terminal gateway of claim 25, wherein the table further comprises an electronic mail address of the endpoint.

57. (New) The endpoint of claim 33, wherein the table further comprises an electronic mail address of the endpoint.

58. (New) The endpoint of claim 39, wherein the table further comprises an electronic mail address of the endpoint.